

PCT10

DATE: 08/06/2002 TIME: 12:45:43 RAW SEQUENCE LISTING PATENT APPLICATION: US/10/030,306

Input Set : A:\661926.txt

Does Not Comply

244

292

340

Output Set: N:\CRF3\08062002\J030306.raw Corrected Diskette Needec 3 <110> APPLICANT: Sagami Chemical Research Center, 6 <120> TITLE OF INVENTION: Human proteins having hydrophobic domains and DNAs encoding these proteins 9 <130> FILE REFERENCE: 661926 7 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/030,306 C--> 11 <141> CURRENT FILING DATE: 2002-06-27 11 <150> PRIOR APPLICATION NUMBER: JP 11-194359 12 <151> PRIOR FILING DATE: 1999-07-08 14 <160> NUMBER OF SEQ ID NOS: 30 ERRORED SEQUENCES 1068 <210> SEQ ID NO: 25 1069 <211> LENGTH: 2150 1070 <212> TYPE: DNA 1071 <213> ORGANISM: Homo sapiens 1073 <220> FEATURE: 1074 <221> NAME/KEY: CDS 1075 <222> LOCATION: (32)...(1282) 52 1078 ggtttetgeg ggtgaggetg gegeeegtae e atg age gag geg gae ggg etg 1081 cga cag cgc cgg ccc ctg cgg ccg cag gtc gtc aca gac gat gat ggc 100 1082 Arg Gln Arg Arg Pro Leu Arg Pro Gln Val Val Thr Asp Asp Asp Gly 1084 cag goe eeg gag get aag gae gge age tee tit age gge aga gtt tie 148 1085 Gln Ala Pro Glu Ala Lys Asp Gly Ser Ser Phe Ser Gly Arg Val Phe 1087 cga gtg acc ttc ttg atg ctg gct gtt tct ctc acc gtt ccc ctg ctt 196 1088 Arg Val Thr Phe Leu Met Leu Ala Val Ser Leu Thr Val Pro Leu Leu

1090 gga gcc atg atg ctg ctg gaa tct cct ata gat cca cag cct ctc agc

1091 Gly Ala Met Met Leu Leu Glu Ser Pro Ile Asp Pro Gln Pro Leu Ser

1093 ttc aaa gaa ccc ccg ctc ttg ctt ggt gtt ctg cat cca aat acg aag

1094 Phe Lys Glu Pro Pro Leu Leu Gly Val Leu His Pro Asn Thr Lys

1096 ctg cga cag gca gaa agg ctg ttt gaa aat caa ctt gtt gga ccg gag 1097 Leu Arg Gln Ala Glu Arg Leu Phe Glu Asn Gln Leu Val Gly Pro Glu

90

1098

## DATE: 08/06/2002 PATENT APPLICATION: US/10/030,306 TIME: 12:45:44

Input Set : A:\661926.txt
Output Set: N:\CRF3\08062002\J030306.raw

| Output Set: N:\CRF3\08062002\0003030303  | 200   |
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| and and gat que  | 388   |
| 1099 tcc ata gca cat att ggg gat gtg atg ttt act ggg aca gca gat ggc 1099 tcc ata gca cat att ggg gat gtg atg ttt act ggg aca gca gat ggc 1100 Ser Ile Ala His Ile Gly Asp Val Met Phe Thr Gly Thr Ala Asp Gly 1100 Ser Ile Ala His Ile Gly Asp Val Met Phe Thr Gly Thr Ala Asp Gly 1100 Ser Ile Ala His Ile Gly Asp Val Met Phe Thr Gly Thr Gag acc att gcc cqg ttt   |       |
| 1099 tcc ata gca cus are sold list lie Gly Asp Val Met Phe III Gly Asp Val Met Phe II Gly Asp Val Met Phe | 426   |
| 1100 Ser Tie Ala nie 110   | 436   |
| 1101 105 and ott gas aat ggt gas ata ggy dec all Ala Arg Phe   |       |
| 1100 Ser Ile Ala His Ile GI III<br>1101 105 110<br>1102 cgg gtc gta aaa ctt gaa aat ggt gaa ata gag acc att gcc cqg ttt<br>1102 cgg gtc gta aaa ctt gaa aat ggt gaa ata gag acc att gcc cqg ttt<br>1103 Arg Val Val Lys Leu Glu Asn Gly Glu Ile Glu Thr Ile Ala Arg Phe<br>130 135   | 4.0.4 |
| 1103 Arg Val Val 2125  | 484   |
| 1104 120 1105 ggt tcg ggc cct tgc aaa acc cga gat gat gag cct gtg tgc ggs ggt 1105 ggt tcg ggc cct tgc aaa acc cga gat gat gag cct gtg tgc ggs 1105 ggt tcg ggc cct tgc aaa acc cga gat gat gat gag cct gtg tgc ggs 1105 ggt tcg ggc gat 140  140  140  140  145  140  140  140  |       |
| 1105 ggt tcg ggc ccc cys Lys Thr Arg Asp Asp Glu Plo val 150   |       |
| 1106 GLY Set GLY 120 140 145   | 532   |
| 1107 at atc cgt gca ggg ccc aat ggg act ctc tab y Ala Asp  |       |
| 1106 Gly Ser Gly Pro Cys L/o  140  140  1107  1108 ccc ctg ggt atc cgt gca ggg ccc aat ggg act ctc ttt gtg gcc gat  1109 Pro Leu Gly Ile Arg Ala Gly Pro Asn Gly Thr Leu Phe Val Ala Asp  165  160  155  |       |
| 1109 Pro Led GIV 125 160 agt gaa gtg aaa   | 580   |
| 1110  1110  1111 gca tac aag gga cta ttt gaa gta aat ccc tgg aaa cgt gdd 459  1111 gca tac aag gga cta ttt gaa gta aat ccc tgg aaa cgt gdd 459  1111 gca tac aag gga cta ttt gaa gta aat ccc tgg aaa cgt gdd 459  1112 Ala Tyr Lys Gly Leu Phe Glu Val Asn Pro Trp Lys Arg Glu Val Lys  170  170  170  170  170  170  170  |       |
| 1111 gca tac aag gga cta too y Phe Glu Val Asn Pro Trp Lys Arg 312   | _     |
| 1112 Ala Tyr Lys our 175   | 628   |
| 1113 170 tag gag aca ccc att gag ggg aag acc acs Phe   |       |
| 1112 Ala Tyr Lys Gly Led The 175  175  1113  170  1114 ctg ctg ctg tcc tcc gag aca ccc att gag ggg aag aac atg tcc ttt  1114 ctg ctg tcc tcc gag aca ccc att gag ggg aag aac atg tcc ttt  1114 ctg ctg ctg tcc tcc gag aca ccc att gag ggg aag aac atg tcc ttt   |       |
| 1115 Leu Leu Leu Ser 190   | 676   |
| 1116 185  1117 gtg aat gat ctt aca gtc act cag gat ggg agg aag att tut be act to see the see that the see tha |       |
| 1117 gtg aat gat ctt aca geo Thr Gln Asp Gly Arg Lys 11e 171 215   |       |
| 1118 Val Ash Asp Bed 205   | 724   |
| 1119 200 and tag caa aga cga gac tac ctg ctt ccg year  |       |
| 1118 Val Asn Asp Leu IIII Val 200 205 1119 200 1120 gat tot ago ago aaa tgg caa aga cga gac tac ctg ctt ctg gtg atg 1121 Asp Ser Ser Ser Lys Trp Gln Arg Arg Asp Tyr Leu Leu Leu Val Met 230 220 220 220 220 220 220 220 220 220   |       |
| 1121 Asp Ser Ser Ser 320   | 772   |
| 1121 Asp Ser Ser Ser Lys Trp 225  1122  1123 qag ggc aca gat gac ggg cgc ctg ctg gag tat gat act gtg acc agg 1124 Glu Gly Thr Asp Asp Gly Arg Leu Leu Glu Tyr Asp Thr Val Thr Arg 1124 Glu Gly Thr Asp Asp Gly Arg Leu Leu Glu Tyr Asp Thr Val Thr Arg 245   |       |
| 1123 gag ggc aca gat gac ggg og Leu Leu Glu Tyr Asp Ini var 1123   |       |
| 1124 Glu Gly IIII Apr 240 ant gga gtc cag  | 820   |
| 1125 235 25 25 25 25 25 25 25 25 25 25 25 25 25  |       |
| 1124 Glu Gly Thr Asp Asp Gly 1235  240  1125  235  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  1126 gaa gta aaa gtt tta ttg gac cag ctg cgg ttc ccg aat gga gtc cag  |       |
| 1127 Glu Val Lys (dz 255 255 acc atg qcc   | 868   |
| 1128 250 1129 ctg tct cct gca gaa gac ttt gtc ctg gtg gca gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gac ttt gtc ctg gtg gca gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gac ttt gtc ctg gtg gca gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gac gc gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gc gc gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gc gc gaa dca dcc ds Ala 1129 ctg tct cct gca gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gc gc gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gc gc gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gac ttt gtc ctg gtg gca gaa dca dcc ds Ala 1129 ctg tct cct gca gaa gac ttt gtc ctg gtg gca gaa dca dcc ds Ala  |       |
| 1129 ctg tct cct gcd gdd gdd y Leu Val Ala Glu III III   |       |
| 1130 Leu Ser Pio Ala 270   | 916   |
| 1131 265 atc tac gtt tct ggc ctg atg aag ggc 999 3   |       |
| 1130 Leu Ser Pro Ala Giu Asp<br>270<br>1131 265 270<br>1132 agg ata cga aga gtc tac gtt tct ggc ctg atg aag ggc ggg gct gat<br>1132 agg ata cga aga gtc tac gtt tct ggc ctg atg aag ggc ggg gct gat<br>1132 agg ata cga aga gtc tac gtt tct ggc ctg atg aag ggc ggg gct gat<br>1132 agg ata cga aga gtc tac gtt tct ggc ctg atg aag ggc ggg gct gat<br>1132 agg ata cga aga gtc tac gtt tct ggc ctg atg aag ggc ggg gct gat  |       |
| 1133 Arg Tie Arg May 285   | 964   |
| 1134 280 atg cct gga ttt cca gac add atc cgg   |       |
| 1133 Arg Ile Arg Arg Val 172 290  1134 280 285  1135 ctg ttt gtg gag aac atg cct gga ttt cca gac aac atc cgg ccc agc  1136 Leu Phe Val Glu Asn Met Pro Gly Phe Pro Asp Asn Ile Arg Pro Ser  300 305  | _     |
| 1136 Leu Phe Val Gla 1300  | 1012  |
| 1137 arg tag gtg ggc atg tcg acc atc egg atg Pro Asn Pro   |       |
| 1138 ago tot ggg ggg tac tys Jan Gly Met Ser Thr 11e Arg 126   |       |
| 1139 Ser Sei Gii 315 320 an tag att aaa agg  | 1060  |
| 1139 Ser Ser Gly Gly Tyr Try  320  1140  1141 ggg ttt tcc atg ctg gat ttc tta tct gag aga ccc tgg att aaa agg 1141 ggg ttt tcc atg ctg gat ttc tta tct gag aga ccc tgg att aaa agg 1142 Gly Phe Ser Met Leu Asp Phe Leu Ser Glu Arg Pro Trp Ile Lys Arg 1142 Gly Phe Ser Met Leu Asp Phe Leu 330   |       |
| 1141 ggg ttt tcc aty ctg she Leu Ser Glu Arg Pro 11p 11c 27  |       |
| 1142 Gly phe set has 335   | 1108  |
| 1143 330  1144 atg att ttt aag ctc ttt agt caa gag acg gtg atg aag ctc ys  1144 atg att ttt aag ctc ttt agt caa gag acg gtg atg aag ctc ys  1145 Met Ile Phe Lys Leu Phe Ser Gln Glu Thr Val Met Lys Phe Val Pro  355  350  350  367  378  378  378  378   |       |
| 1144 atg att til dag coo be  |       |
| 1145 Met Ile Phe Lys Lou 350   | 1156  |
| 1146 345 are sto sto sto sta saa oto ago sac ago yyu yoo aar ya  |       |
| 1145 Met Ile Phe Lys Led The 355<br>1146 345 350<br>1147 cgg tac agc ctc gtc cta gaa ctc agc gac agc ggt gcc ttc cgg aga   |       |
|  |       |

DATE: 08/06/2002 RAW SEQUENCE LISTING TIME: 12:45:44 PATENT APPLICATION: US/10/030,306

Input Set : A:\661926.txt
Output Set: N:\CRF3\08062002\J030306.raw

| Input Set : A:\\0053\08062002\J030306.raw Output Set: N:\CRF3\08062002\J030306.raw   |                  |
|--|------------------|
| 1148 Arg Tyr Ser Leu Val Leu Glu Leu Ser Asp Ser Gly Ala Phe Arg Arg 375 365   |                  |
| 1148 Arg Tyr Ser Leu Val Leu Glu Leu Ser Lar 370   | 1204             |
| 1148 Arg Tyr Ser Led Val 370  1149 360  1150 agc ctg cat gat ccc gat ggg ctg gtg gcc acc tac atc agc gag gtg  1150 agc ctg cat gat ccc gat ggg ctg yal Ala Thr Tyr Ile Ser Glu Val  390  | 1204             |
| 1149 360 1150 agc ctg cat gat ccc gat ggg ctg gtg gcc acc tac atc age gar yall state agg tcc ccc tac atc age gar yall state agg tcc ccc ttc agg tcc ccc ttc agg tcc ccc ttc  |                  |
| 1150 age tog His Asp Pro Asp Gly Leu Val Ald III 172 390   |                  |
| 1151 Ser Leu HIS ASP 120 385<br>1152 380<br>1153 cac gaa cac gat ggg cac ctg tac ctg ggc tct ttc agg tcc ccc ttc<br>1153 cac gaa cac gat ggg cac ctg tac ctg ggc tct ttc agg tcc ccc ttc   | 1252             |
| 1152 and gag cac ctg tac ctg ggc tot tic agg cor Pro Phe   |                  |
| 1153 cac gaa cac gat gay the Leu Tyr Leu Gly Ser Phe Arg Ser Fie The   |                  |
| 1. F. Tig Cin His Nap Of 1   | 1300             |
| 1154 HIS GIG HIS GIG TO AND ADDRESS AND AD |                  |
| 1156 ctc tqc aga ctc agc ctc cay yet yet   |                  |
|  | 1360             |
| 1157 Leu Cys Arg heu 652 415  1158 410 415  1159 cetgecaege aggecaggag tetteacaet caggeaceag geetggteea ggaggagetg  1159 cetgecaege aggecaggag tetteacaet geacetgtta gteeetgaga ggtggtggga   |                  |
| 1158 410  1159 cctgecacge aggecaggag tetteacact caggeaccag geetggteed ggaggggga  1160 tggacacagt cgtggtteaa gtgtecacat geacctgtta gteeetgaga ggtggtggga  1160 tggacacagt cgtggtteaa ggatgecegg geeceacctg ggettgtett tetgtttaga  | 1420             |
| 1159 cctgctage cgtggttcaa gtgtccacat gcacctgtta ggettgtctt tctgtttaga  | 1480             |
| 1160 tggacacagt catteetega ggatgeeegg geeceaeegg gteeaggeat tttctcttaa   | (1550:1540       |
| 1159 cctgccacge aggetages  1160 tggacacagt cgtggttcaa gtgtccacat gcacctgtta gtccttgaga ggettgtctt tetgtttaga  1161 atggctgctt cattcctcga ggatgcccgg gcccacctg ggettgtctt tetgtttaga  1161 atggctgctt cattcctcga ggatgcccgg ataaattcat gtaaagccat tttctcttaa  E> 1162 gggaagtgta acatatctgc catgaggaac ataaattcat gtaaagccat tgggaagctc cttgcacttg  1163 acaaaacaaa actttctaag tacagtcatt ctctaggatt tgggaagctcc tgctgcggcc   | 1600             |
| E> 1162 gggaagtgta actated ag tacagtcatt ctctaggatt tgggaagtte tgctgcggcc  | 1660             |
| E> 1162 gggaagtgta acatacess  1163 acaaaacaaa actttctaag tacagtcatt ctctaggatt tggggaggtg tgctggggcc  1164 gaacagggct caggtgggtg gagcagtaag gcactaceca gagagcttgc tgctggggcc  1164 gaacagggct caggtgggtg tcttctttac tatatataac gtgcggtcat acctttcttc   | 1720             |
| 1164 gaacaggget caggtgggtt to tettettac tatatataac gtgcggtcat accttects  | 1780             |
| 1163 acaaaacaaa acttteeday gagcagtaag gcactaccca gagagettye egosyste 1164 gaacaggget caggtgggtg gagcagtaag gcactaccca gagagettye egosyste 1165 ctgtcctgcg gcctcaaagt tettettac tatatataac gtgcggttgag gccagcggtg 1165 ctgtcctgcg gcctcaaaga gcagagygag catggcccag gggtgttgag gcgtgggctc  | 1840             |
| 1164 gaacagggct cayytygys solution the state of the state | 1900             |
| 1167 agagecett tagecaagae atggaactyt getagegete agagaggaet ttgetgggtt  | 1960             |
| 1166 gttgtggtgg ggatggatga atggaactgt gttctcaagg gttatgtggg gogosys 1167 agagccgtgt tagccaagac atggaactgt gttctcaagg gttatgtgggtt 1168 tccatagtgt gtatgaaaag cttgttgact ctagcggaattg gatgattctg caattcggga 1169 tcttctgtg aatatctccg tgctgaccat gctggaattg gatgattctt gacctctaga   |                  |
| 1168 tocatagist gratiqued 1169 tottetets aatatotoog tgotgaccat gotggaattig gatgations daar 1169 tottetets aatatotoog tgotgaccat tgtotgtgat ottigitott gacctotaga 1170 cotactgoag gggtoogtit agtaacgtot tgtotettig otcatgist ataagoocca acgtgitaat gtoatottig otcatgist taataaataa  | 2020             |
| The totages aggic could be agreed to the control of the state of the s | 2080             |
| 1169 tettletgtg adtateteds agtaacgtet tgtetgtgat ettigttett gadar<br>1170 cetaetgeag gggteegttt agtaacgtet tgtetgtgat ettigttett gadar<br>1171 ceceaagatg tgaacagtge aegtgttaat gteatetttg eteatgtgtt ataageecea<br>1172 agttgetgta tatttteaca agtatgteta eacactggte atgattttga taataaataa<br>1172 agttgetgta  | 2140             |
| 1171 ccccaagaty to tatttcaca agtatgtcta cacactggtc atgatettga s  | 2150             |
| 1172 agttgctgta tatters i  |                  |
| 1173 CGATAGGUY   |                  |
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| 1481 (217) LENGTH: 1892  |                  |
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| 1/Q// 2/// NAME/ NET   |                  |
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| 1488 <222> LOCATION: (3)(1000)   | 49               |
| 1488 <222> LOCATION: (3)(1884)<br>1490 <400> SEQUENCE: 30<br>1491 agag atg gca gtg agc gag agg ggg ctc ggc cgc ggg agc ccc gcg<br>1491 agag atg gca gtg agc gag agg ggg ctc ggc cgc ggg agc ccc gcg  |                  |
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| 1488 <222> LOCATION: (3)(1884) 1490 <400> SEQUENCE: 30 1491 agag atg gca gtg agc gag agg agg ggg ctc ggc cgc ggg agc ccc gcg 1491 agag atg gca gtg agc gag agg agg ggg ctc ggc cgc ggg agc ccc gcg 1491 agag atg gca gtg agc gag agg ggg ctc ggc cgc ggg agc ccc gcg 1492 Met Ala Val Ser Glu Arg Arg Gly Leu Gly Arg Gly Ser Pro Ala 150 160 170 180 180 180 180 180 180 180 180 180 18   |                  |
| 1488 <222> LOCATION: (3)(1884) 1490 <400> SEQUENCE: 30 1491 agag atg gca gtg agc gag agg agg ggg ctc ggc cgc ggg agc ccc gcg 1491 agag atg gca gtg agc gag agg agg ggg ctc ggc cgc ggg agc ccc gcg 1491 agag atg gca gtg agc gag agg ggg ctc ggc cgc ggg agc ccc gcg 1492 Met Ala Val Ser Glu Arg Arg Gly Leu Gly Arg Gly Ser Pro Ala 150 160 170 180 180 180 180 180 180 180 180 180 18   |                  |
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| 1488 <222> LOCATION: (3)(1007) 1490 <400> SEQUENCE: 30 1491 agag atg gca gtg agc gag agg agg ggg ctc ggc cgc ggg agc ccc gcg 1491 agag atg gca gtg agc gag agg agg ggg ctc gcc ggc ggg agc ccc gcg 1492  | 97<br>145<br>193 |

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Input Set : A:\661926.txt
Output Set: N:\CRF3\08062002\J030306.raw

| Output Set: N:\CRF3\08062002\00000  | 289   |
|---|-------|
| . The against the total | 289   |
| 1506 ctg gtg ggg ttc agt ctc agc cgg gtt cgg tct ggc aga gtt cgc tcc  1506 ctg gtg ggg ttc agt ctc agc cgg gtt cgg tct ggc aga gtt cgc tcc  1506 ctg gtg ggg ttc agt ctc agc cgg gtt cgg tct ggc aga gtt cgc tcc  |       |
| 1506 ctg gtg ggg ttc agt ctc agc cgg gtt cgg tct ggc aga gtc 1506 ctg gtg ggg ttc agt ctc agc cgg gtt cgg tct ggc aga gtc 1507 Leu Val Gly Phe Ser Leu Ser Arg Val Arg Ser 1507 Leu Val Gly Phe Ser Leu Ser Arg Val Arg Ser 90 90 85  | 337   |
| 1507 Leu Val Gly Phe Set 25 90<br>85 90<br>1508 80 85<br>1509 tat tca acc cgg gat ttc cag gac tgc cct ctc cag aaa aac agt agc<br>1509 tat tca acc cgg gat ttc cag gac tgc cct ctc cag aaa aac agt agc<br>1509 tat tca acc cgg gat ttc cag gac tgc cct ctc cag aaa aac agt agc<br>1509 tat tca acc cgg gat ttc cag gac tgc cct ctc cag aaa aac agt agc   | 331   |
| 1500 tat toa acc egg gat tte eag gae tye ees all Lys Asn Ser Ser  |       |
| 1508 80  1509 tat tca acc cgg gat ttc cag gac tgc cct ctc cag ada ddc dy 1509 tat tca acc cgg gat ttc cag gac tgc cct ctc cag ada ddc dy 1509 tat tca acc cgg gat ttc cag gac tgc cct ctc cag ada ddc dy 1509 tat tca acc cgg gat ttc cag gac tgc cag gat ctg cag gtc cag   | 385   |
| 1510 Tyr Ser Thr Alg Asp 100<br>100<br>1511<br>1512 agt ttc ctg gtc ctg ttc ctc atc aac acc aag gat ctg cag gtc cag<br>1512 agt ttc ctg gtc ctg ttc ctc atc aac acc aag gat ctg cag gtc cag<br>1512 agt ttc ctg gtc ctg ttc ctc atc aac acc aag gat ctg cag gtc cag<br>1512 agt ttc ctg gtc ctg ttc ctc atc aac acc aag gat ctg cag gtc cag   | 303   |
| 1511  1512 agt ttc ctg gtc ctg ttc ctc atc aac acc aag gat ctg cdg gr  1512 agt ttc ctg gtc ctg ttc ctc atc aac acc aag gat ctg cdg gr  1513 Ser Phe Leu Val Leu Phe Leu Ile Asn Thr Lys Asp Leu Gln Val Gln  125  120  125   |       |
| 1513 Ser Phe Leu Val Leu Phe Leu IIe Ash 120  | 433   |
| 1513 Ser Phe Leu Val Hed 120<br>1514 120<br>1514 120<br>1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt ccc ggg ctc<br>1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt ccc ggg ctc<br>1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt ccc ggg ctc  | • • • |
| 1514 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag tat gga gag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag cag aag cag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag aag aag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag aag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag aag aag acg ttg ttt atc ttt cee 933 1515 gtg cgg aag aag aag aag aag aag aag aag aa  |       |
| 1516 Val Arg Lys Tyr Gly Glu Gli Lys The 140  | 481   |
| 1516 Val Arg Lys Tyl Gly  135  1517  130  135  1518 ctc ccg gaa gca ccc tcc aaa cca ggg ctc ccg aag cca cag gcc aca  1518 ctc ccg gaa gca ccc tcc aaa cca ggg ctc ccg aag cca cag gcc aca  1518 ctc ccg gaa gca ccc tcc aaa cca ggg ctc ccg aag cca cag gcc aca   |       |
| 1517 130  1518 ctc ccg gaa gca ccc tcc aaa cca ggg ctc ccg aag cca cdg 350  1518 ctc ccg gaa gca ccc tcc aaa cca ggg ctc ccg aag cca cdg 350  1519 Leu Pro Glu Ala Pro Ser Lys Pro Gly Leu Pro Lys Pro Gln Ala Thr  1519 Leu Pro Glu Ala Pro Ser Lys Pro Gly Leu Pro Lys Pro Gln Ala Thr  1519 Leu Pro Glu Ala Pro Ser Lys Pro Gly Leu Pro Lys Pro Gln Ala Thr  1519 Leu Pro Glu Ala Pro Ser Lys Pro Gly Leu Pro Lys Pro Gln Ala Thr  |       |
| 1519 Leu Pro Glu Ala Pro Ser Lys 110 007 155  | 529   |
| 1520 145 agg gga ggg acc tot gca gcc agg adg tot  |       |
| 1519 Leu Pro Giu Alu 110  150  1520  145  1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agc aag ccc   |       |
| 1520 145 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agg and 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agg Pro 1521 gtc ccc cgc aag gtg gat ggc gga ggg acc tct gca gcc agg Pro 1522 Val Pro Arg Lys Val Asp Gly Gly Thr Ser Ala Ala Ser Lys Pro 170 170 170 170 170 170 170 170 170 170  | 577   |
| 1522 Val Pro Arg Lys Val 1165<br>1523 160 165<br>1524 aag tca aca ccc gca gtg att cag ggt cct agt ggg aag gac aag gac<br>1524 aag tca aca ccc gca gtg att cag ggt cct agt ggg aag gac aag gac<br>1524 aag tca aca ccc gca gtg att cag ggt pro Ser Gly Lys Asp Lys Asp   |       |
| 1524 aag toa aca coc god gty att day pro Ser Gly Lys ASP Lys ASP  |       |
| 1523 160  1524 aag tca aca ccc gca gtg att cag ggt cct agt ggg aag gdc ary  1524 aag tca aca ccc gca gtg att cag ggt cct agt ggg aag gdc ary  1524 aag tca aca ccc gca gtg att cag ggt cct agt ggg aag gdc ary  1524 aag tca aca ccc gca gtg att cag ggt cct agt ggg aag gdc ary  1525 Lys Ser Thr Pro Ala Val Ile Gln Gly Pro Ser Gly Lys Asp  180  180  | 625   |
| 1526 ago cao cto aao ao too tao aao tic ago sar Phe   |       |
| 1525 Lys Ser Thr P10 Ard  180  1526  1527 ctg gtg ttg ggc ctg agc cac ctc aac aac tcc tac aac ttc agt ttc  1527 ctg gtg ttg ggc ctg agc cac ctc aac aac tcc tac aac ttc agt ttc  205  |       |
| 1526  1527 ctg gtg ttg ggc ctg agc cac ctc aac aac tcc tac aac tee agc 1527 ctg gtg ttg ggc ctg agc cac ctc aac aac tcc tac aac tee agc 205  1528 Leu Val Leu Gly Leu Ser His Leu Asn Asn Ser Tyr Asn Phe Ser Phe  205  200  200  200  200  200  200  20  | 673   |
| 1528 Leu Val Leu Gly 200  1529  1530 cac gtg gtg atc ggc tct cag gcg gaa gaa ggc cag tac agc ctg aac  1530 cac gtg gtg atc ggc tct cag gcg gaa gaa ggc cag tac agc ctg aac  1530 cac gtg gtg atc ggc tct cag gcg gaa gaa ggc cag tac agc ctg aac  |       |
| 1529 1530 cac gtg gtg atc ggc tct cag gcg gaa gaa ggc cag tac age sty 1530 cac gtg gtg atc ggc tct cag gcg gaa gaa ggc cag tac age sty 1531 His Val Val Ile Gly Ser Gln Ala Glu Glu Gly Gln Tyr Ser Leu Asn 220 215   |       |
| 1531 His val val 110 527 215 are get coa tto gao  | 721   |
| 1532 210 210 210 210 210 210 210 210 210 21   |       |
| 1531 His Val Val Tie GIP 215  1532 210  1533 ttc cac aac tgc aac aat tca gtg cca gga aag gag cat cca ttc gac  1533 ttc cac aac tgc aac aat tca gtg cca gga aag gag cat cca ttc gac  1534 Phe His Asn Cys Asn Asn Ser Val Pro Gly Lys Glu His Pro Phe Asp  235  230  230  245 ggc ttc ctg tcg gca  |       |
| 1534 Phe His Ash Cys Ash 230 230 1535 225 230 1536 atc acg gtg atg atc cgg gag aag aac ccc gat ggc ttc ctg tcg gca 1536 atc acg gtg atg atc cgg gag aag aac ccc gat ggc ttc ctg tcg gca 1536 atc acg gtg atg atc cgg gag aag aac ccc gat ggc ttc ctg tcg gca 255 255  | 769   |
| 1535 223 atg atg atg cgg gag aag aac ccc gat ggo coo ser Ala  |       |
| 1535 225  1536 atc acg gtg atg atc cgg gag aag aac ccc gat ggc ttc ccg strain Ala  1536 atc acg gtg atg atc cgg gag aag aac ccc gat ggc ttc ccg strain Ala  1537 Ile Thr Val Met Ile Arg Glu Lys Asn Pro Asp Gly Phe Leu Ser Ala  255  245  | 0.17  |
| 1537 Ile Thr Val Met 1245  1538 240  245  1539 gcg gag atg ccc ctt ttc aag ctc tac atg gtc atg tcc gcc tgc ttc  1539 gcg gag atg ccc ctt ttc aag ctc tac atg gtc atg tcc gcc tgc ttc  250  245  1538 240  250  270  | 817   |
| 1538 240 and grad atg ccc ctt ttc aag ctc tac atg gtc day Met Ser Ala Cys Phe   |       |
| 1538 240 1539 gcg gag atg ccc ctt ttc aag ctc tac atg gtc atg tcc gee 33 1539 gcg gag atg ccc ctt ttc aag ctc tac atg gtc atg tcc gee 33 1539 gcg gag atg ccc ctt ttc aag ctc tac atg gtc atg tcc gee 33 1538 240 260 260 260 260 260 260 260 260 260 26  | 0.65  |
| 1540 And ord 260 260 to the type agg aac acg tac  | 865   |
| 1540 Ala Glu Met Pro Ecd 260  1541  1542 ctg gcc gct ggc atc ttc tgg gtg tcc atc ctc tgc agg aac acg tac  1542 ctg gcc gct ggc atc ttc tgg gtg tcc atc ctc tgc agg aac acg tac  1542 ctg gcc gct ggc atc ttc tgg gtg tcc atc ctc tgc agg aac acg tac  1543 Leu Ala Ala Gly Ile Phe Trp Val Ser Ile Leu Cys Arg Asn Thr Tyr  285  280  285   |       |
| 1542 Ceg 900 January Republic Phe Trp Val Sel 110 Down 1  | 913   |
| 1544 275 275 275 275 275 275 275 275 275 275  | 913   |
| 1543 Leu Ala Ala GI 275  1544  1545 agc gtc ttc aag atc cac tgg ctc atg gcg gcc ttg gcc ttc acc aag  1545 agc gtc ttc aag atc cac tgg ctc atg gcg gcc ttg gcc ttc acc aag  1546 Ser Val Phe Lys Ile His Trp Leu Met Ala Ala Leu Ala Phe Thr Lys  1546 Ser Val Phe Lys Ile His Trp Leu Met Ala Ala Leu Ala Phe Thr Lys  295  |       |
| 1546 Ser Val Phe Lys Ile His Trp Leu Met 112  | 961   |
| 1546 Ser Val Phe Lys Tro 295  1547 290  1548 agc atc tct ctc ctc ttc cac agc atc aac tac ttc atc aac agc atc agc atc agc atc aac tac ttc atc ac agc atc agc agc atc agc atc agc agc agc agc agc agc agc agc agc ag  | 701   |
| 1548 ago ato tot oto oto tto cac ago ato ago Tyr Tyr Phe Ile Asn Ser  |       |
| 1547  1548 agc atc tct ctc ctc ttc cac agc atc aac tac tac ttc dtc dtc dtc dtc dtc dtc dtc dtc dt   | 1009  |
| 1549 Ser Ile Ser Leu Lou III 315<br>1550 305 310<br>1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc ctt gcc gtc atg tac tac atc gca cac 1551 cag ggc gcc gcc gcc atc gcc gcc atc gcc gcc atc gcc gcc gcc atc gcc gcc atc gcc gcc gcc gcc gcc gcc gcc gcc gcc g   | 100-  |
| 1551 cag ggc cac ccc atc gaa ggc ccc goo yal Met Tyr Tyr Ile Ala HIS  |       |
| 1550 305  1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac day 1551 cag ggc cac ccc atc gaa ggc ctt gcc gtc atg tac tac day 1552 Gln Gly His Pro Ile Glu Gly Leu Ala Val Met Tyr Tyr Ile Ala His 335  335  325  | 1057  |
| 1553 320 at a ct att atc acc atc gcc ctg att ggc cca  |       |
| 1552 Gln Gly HIS P10 116 325 330 1553 320 325 1554 ctg ctg aag ggc gcc ctc ctc ttc atc acc atc gcc ctg att ggc tca 1554 ctg ctg aag ggc gcc ctc ctc ttc atc acc atc gcc ctg att ggc tca   |       |
|   |       |

DATE: 08/06/2002 TIME: 12:45:44 RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/030,306

Input Set : A:\661926.txt

Output Set: N:\CRF3\08062002\J030306.raw

| Output Set: N:\CRF3\08062002\J030306.14"   |         |
|--|---------|
| Output Set: N:\CRF3\cools  1555 Leu Leu Lys Gly Ala Leu Leu Phe Ile Thr Ile Ala Leu Ile Gly Ser  350  340  340  340  340  340  340  340  |         |
| 350  | 1105    |
| 1555 Leu Leu Lys Gly Ala Leu Leu File 345  340  1556  1557 ggc tgg gcc ttc atc aag tac gtc ctg tcg gat aag gag aag aag gtc  1557 ggc tgg gcc ttc atc aag tac gtc ctg Ser Asp Lys Glu Lys Lys Val  365  360   | 1105    |
| 1555 Led 1564 340  1556 340  1557 ggc tgg gcc ttc atc aag tac gtc ctg tcg gat aag gag day day 340  1557 ggc tgg gcc ttc atc aag tac gtc ctg tcg gat aag gag day day 340  1558 ggc tgg gcc ttc atc aag tac gtc ctg gcc aac gtg gcc tac atc aag gtc ctg gcc aac gtg gcc tac atc aag gtc ctg gcc aac gtg gcc tac atc  |         |
| 1557 ggc tgg gcc ttc atc add Tur Val Leu Ser Asp Lys Glu 375   |         |
|  | 1153    |
| 355 and cag qtc ctg gcc aac gtg Ala Tyr Ile  |         |
| 1557 ggc cys Ala Phe Ile Lys Tyl Val 360 1558 Gly Trp Ala Phe Ile Lys Tyl Val 360 1559 1560 ttt ggg atc gtg atc ccc atg cag gtc ctg gcc aac gtg gcc tac atc 1561 Phe Gly Ile Val Ile Pro Met Gln Val Leu Ala Asn Val Ala Tyr Ile 370 370 370 370 370 370 370 370 370 370   |         |
|  | 1201    |
| 1562 370 1562 agc gag gaa ggc gcc agc gac tac gtg ces Trp Lys  |         |
| 1560 Phe Gly Ile Val Ile Pro Met GIN 375  1561 Phe Gly Ile Val Ile Pro Met GIN 375  370  1562  1563 atc atc gag tcc cgc gag gaa ggc gcc agc gac tac gtg ctg tgg aag gcc agc gcc agc gac tac gtg ctg tgg aag gcc agc gcc agc gac tac gtg ctg tgg aag gcc agc gc |         |
|  | 1249    |
| 1564 ITE   |         |
| 1566 gag att ttg ttc ctg gtg yac odd 11e Cys Cys Gly Ala 11c 415   |         |
|  | 1297    |
| 1567 400 405 and cat ctc cag gat gcg tcc ggg at tcc ggg |         |
| 1566 gag to the Leu Phe Leu Val ASP Hed 410 1567 Glu Ile Leu Phe Leu Val ASP Hed 410 1568 400 1568 400 1569 ccc gta gtc tgg tcc atc cgg cat ctc cag gat gcg tct ggc aca gac 1568 400 1569 ccc gta gtc tgg tcc atc cgg cat ctc cag gat gcg tct ggc aca gac 1568 400 1569 ccc gta gtc tgg tcc atc cgg cat ctc cag gat gcg tct ggc aca gac 1568 425   | _       |
|  | 1345    |
| 1569 CCC Val Val Trp Ser Ile Arg NID 425 1570 Pro Val Val Trp Ser Ile Arg NID 425 1571 420 420 1571 1572 ggg aag gtg gca gtg aac ctg gcc aag ctg aag ctg ttc cgg cat tac 1572 ggg aag gtg gca gtg aac ctg gcc aag ctg aag ctg ttc cgg cat tac 1572 ggg aag gtg gca gtg aac ctg gcc aag ctg Lys Leu Lys Leu Phe Arg His Tyr 1572 ggg aag gtg Ala Val Asn Leu Ala Lys Leu Lys Leu Phe Arg His Tyr 1572 ggg aag gtg gca gtg aac ctg gcc aag ctg aag ctg ttc cgg cat tac   |         |
| 1572 ggg aag gtg gca gtg aac ctg goo Leu Lys Leu Phe Alg   | - 0     |
|  | 1393    |
| 435 435 the tag gtc tag ttg acc egg atc atc Ile Ala Ile  |         |
| 1574 tat gtc atg gtc atc tgc tac got Tyr Phe Thr Arg 116 116 116 116 116 116 116 116 116 11  |         |
|  | 1441    |
| 1576 tat get Wal Met Val Ile Cys Tyr Val 177 460  1576 Tyr Val Met Val Ile Cys Tyr Val 179 460  455  1577 450  1578 ctg ctg cag gtg gct gtg ccc ttt cag tgg cag tgg ctg tac cag ctc  1578 ctg ctg cag gtg gct gtg ccc ttt cag tgg cag tgg ctg tac cag ctc  1579 Leu Leu Gln Val Ala Val Pro Phe Gln Trp Gln Trp Leu Tyr Gln Leu  470  470  |         |
| 1577 ctg ctg cag gtg gct gtg cco Phe Gln Trp Gln Trp Leu 17  |         |
|  | 1489    |
| 1580 465 1581 ttg gtg gag ggc tcc acc ctg gcc ttc ttc gtg ctc acg ggc tab by 1581 ttg gtg gag ggc tcc acc ctg gcc ttc ttc gtg ctc acg ggc tab by 1582 Leu Val Glu Gly Ser Thr Leu Ala Phe Phe Val Leu Thr Gly Tyr Lys 495 1582 Leu Val Glu Gly Ser Thr Leu Ala Phe Phe Val Ctg cag gag gac 485   |         |
| 1581 ttg gtg gag ggc tcc acc ces Ala Phe Phe Val Leu III of 495  | 2527    |
|  | 1537    |
| 1581 ctg yal Glu Gly Ser Thr Leu Ard 490 1582 Leu Val Glu Gly Ser Thr Leu Ard 490 1583 480 1584 ttc cag ccc aca ggg aac aac ccg tac ctg cag ctg ccc cag gag gac 1584 ttc cag ccc aca ggg aac aac ccg tac ctg cag ctg ccc cag gag gac 1585 Phe Gln Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp 1585 Phe Gln Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp 1585 Phe Gln Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp 1585 Phe Gln Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp 1585 Phe Gln Pro Thr Gly Asn Asn Pro Tyr Leu Gln Leu Pro Gln Glu Asp  |         |
| 1584 ttc cag ccc aca ggg aac dd 1584 ttc cag ccc aca ggg aac dd 510 Tyr Leu GIn Leu FIO 510  | 4505    |
|  | 1585    |
| 1586 att cag atg gag caa gta atg acg gac toe 333 Phe Arg   |         |
| 1507 gag gag gat git ous clu Gln Val Met III 121 525   | . (22   |
|  | 1633    |
| 1589 515 at c aac aaa aca gcc agc ggg cgg si   |         |
| 1588 Glu Gra 515  1589  1590 gaa ggc ctc tcc aaa gtc aac aaa aca gcc agc ggg cgg gda ceg 1590 gaa ggc ctc tcc aaa gtc aac aaa aca gcc agc ggg cgg gda ceg 1590 gaa ggc ctc tcc aaa gtc aac aaa aca gcc agc ggg cgg gda ceg 1590 gaa ggc cgc agc ggg cgg gda ceg 1590 gaa ggc ggc agc ggc ggg cgg gda ceg 1590 gaa ggc ggc agc ggc ggg cgg gda ceg 1590 gaa ggc ggg cgg gda ceg 1590 gaa ggc gg gda ceg 1590 gaa ggc ggg gda ceg 1590 gaa ggc ggg gda ceg 1590 gaa ggc gg gda ceg 1590 gaa gg gg gda ceg 1590 gaa ggc gg gda ceg 1590 gaa gg   |         |
|  | 1690    |
| 1592 530 the angaccasing ggtcgtcctc ccccagcute aggcgccc  | ag 1750 |
| 1593 tgatcac etecacatet tagggagggt ggagggggte cargagreet tectoece  | cc 1810 |
| 1591 GIU GI)  1592  530  1593  tgatcac etceacatet cagaccaaag ggtegteete ceccagcatt teleacecece 1593 tgatcac etceacatet eagaccaaag ggtegteete catgtggace aggegeee 1594 gecettette cacagcgtat gtggggaggt ggagggggte catgtggaag aagagteeet teeteece 1595 etceceggga eeeeggttee eggacaagee catttggaag aagagteeet tatgtgta 1596 enatattggg eagecetgte ettaceeegg gaccaecect eeetteeage tatgtgta   | ca 1870 |
| 1595 ctccccggga ccccggtttc cysaar gaccacccct cccttccay   | 1892    |
| 1594 gecettette cacagegtat gtggggagge 93<br>1594 gecettette cacagegtate eggacaagee catttggaag aagagteet teedat<br>1595 eteeceggga ceeeggttee eggacaagee gaceaeeeet eeetteeage tatgtgta<br>1596 aaatattggg eageeetgte ettaceeegg gaceaeeeet eeetteeage tatgtgta   |         |
| 1596 aaatattggg cugot<br>1597 ataatgacca atctgtttgg ct   |         |
| 7 × 1599 /1  |         |
| $\sim 1601/1$  |         |
| E 1603 / /64   |         |

E--> E--> 1602 164 jalete

VERIFICATION SUMMARY

DATE: 08/06/2002 TIME: 12:45:45

PATENT APPLICATION: US/10/030,306

Input Set : A:\661926.txt Output Set: N:\CRF3\08062002\J030306.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1162 M:254 E: No. of Bases conflict, LENGTH:Input:1550 Counted:1540 SEQ:25

L:1599 M:254 E: No. of Bases conflict, this line has no nucleotides.

L:1602 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1 L:1602 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1892 Found:1893 SEQ:30